SDG&E, June 15,2020

Rulemaking (R.) 15-01-008 to Adopt Rules and Procedures Governing Commission Regulated Natural Gas Pipelines and Facilities to Reduce Natural Gas Leaks Consistent with Senate Bill 1371, Leno.

In Response to Data Request, R15-01-008 2020 June Report
Appendix 5; Rev. 03/31/2020

Notes:

Use a formula-derived value with the formula used in the Annual Emissions column. Do not use a copy and paste-as-value.

At the end of Annual Emissions Column, add a summation total in a cell for a column total, and then highlight orange.

Distribution M&R Station Leaks and Emissions

Number of Stations	Station Classification	Emission Factor (Mscf/yr)	Annual Emissions (Mscf)	Explanatory Notes / Comments
11	B1	0.964	11	2018 EOY Below Grade < 100# Actual Inlet Press
83	B2	1.84	153	2018 Below Grade 100 - 300# Actual Inlet Press
331	B3	12.176	4,030	2018 EOY Below Grade > 300# Actual Inlet Press
2	A1	40.6	81	2018 EOY Above Grade < 100# Actual Inlet Press
12	A2	896.5	10,758	2018 Above Grade 100 - 300# Actual Inlet Press
36	A3	1684.5	60,642	2018 EOY Above Grade > 300# Actual Inlet Press
			75,675	

SDG&E, June 15,2020

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In Response to Data Request, R15-01-008 - 2020 June Report

Appendix 5; Rev. 03/31/2020

Notes:

Use a formula-derived value with the formula used in the Annual Emissions column. Do not use a copy and paste-as-value.

At the end of Annual Emissions Column, add a summation total in a cell for a column total, and then highlight orange

Distribution M&R Station Damage (3rd party dig-ins, natural disasters, etc.):

ID	Geographic Location	Damage Type	Pipe Material	Pipe Size (nominal)	Pipe Age (months)	Pressure (psi)	Leak Grade	Above Ground or Below Ground	Discovery Date (MM/DD/YY)	Repair Date (MM/DD/YY)	Number of Days Leaking	Emission Factor (Mscf/Day)	Annual Emissions (Mscf)	Explanatory Notes / Comments

Sum total 0

SDG&E, June 15,2020

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Notes:

Use a formula-derived value with the formula used in the Annual Emissions column. Do not use a copy and paste-as-value.

At the end of Annual Emissions Column, add a summation total in a cell for a column total, and then highlight orange

Distribution M&R Station Blowdowns:

ID	Geographic Location	Number of Blowdown Events	Annual Emissions (Mscf)	Explanatory Notes / Comments
N/A	SDG&E Territory	475	6	M&R Station Inspection Blowdown.
N/A	SDG&E Territory	2,038	8	External District Reg. Inspection at Distribution M&R Stations - Estimated avg. gas vented = 4 scf/insp
N/A	SDG&E Territory	113	1	Reg. Change out & Internal Reg. Inspection at Distribution M&R Stations - Estimated avg. gas vented = 12 scf/ea
N/A	SDG&E Territory	4	0.1	Filter Change out & Filter Inspection at Distribution M&R Stations - Estimated avg. gas vented = 30 scf/ea.
			16	

SDG&E, June 15,2020

Rulemaking (R.) 15-01-008 to Adopt Rules and Procedures Governing Commission Regulated Natural Gas Pipelines and Facilities to Reduce Natural Gas Leaks Consistent with Senate Bill 1371, Leno.
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Appendix 5; Rev. 03/31/2020

Notes:

The data collected on this sheet is for informational purposes and will not be included in the emissions inventory for 2019. The worksheet is designed to track actual emissions for future reference and to determine if an actual leak based emission accounting is feasible for M&R stations.

If you record data using this table and you only leak survey part of your system, you must extrapolate emissions from leaks up to account for emissions from your entire system for the year.
Use a formula-derived value with the formula used in the Annual Emissions column. Do not use a copy and paste-as-value.
At the end of Annual Emissions Column, add a summation total in a cell for a column total, and then highlight orange

The emissions captured on this tab represent the emissions associated with the operational design and function of the component. Any intentional release of natural gas for safety or maintenance purposes should be included on the Blowdowns worksheet.

Distribution M&R Station Component Vented Emissions:

New Column

ID	Geographic Location	Station Classification	Device Type	Bleed Rate	Manufacturer	Number of Days Emitting	Engineering or Manufacturer's based Estimate of Emissions	Annual Emissions (Mscf)	Explanatory Notes / Comments

Note: No devices

SDG&E, June 15,2020

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Notes:

The data collected on this sheet is for informational purposes and will not be included in the emissions inventory for 2019. The worksheet is designed to track actual leaks for future reference and to determine if an actual leak based emission accounting is feasible for M&R stations.

If you record data using this table and you only leak survey part of your system, you must extrapolate emissions from leaks up to account for emissions from your entire system for the year.

Use a formula-derived value with the formula used in the Annual Emissions column. Do not use a copy and paste-as-value.

At the end of Annual Emissions Column, add a summation total in a cell for a column total, and then highlight orange

The emissions captured on this tab represent the emissions associated unintentional leaks that if repaired would not leaking. If the component is releasing gas or "bleeding" as a result of its design or function then it is not to be captured in this tab.

Distribution M&R Station Component Fugitive Leaks: New Column

ID	Station ID	Station Classification	Device Type	Bleed Rate	Manufacturer	Pressure (psi)	Discovery Date (MM/DD/YY)	Repair Date (MM/DD/YY)	Number of Days Leaking	Emission Factor (Mscf/day)	Annual Emissions (Mscf)	Explanatory Notes / Comments
510000715528	92130 B3		C				12/20/2019	12/20/2019	354	NA	NA	
510000715415	92116 B3		C				12/17/2019	12/17/2019	351	NA	NA	
510000700745	92027 B3		C				11/11/2019	11/11/2019	315	NA	NA	
510000699877	92026 B3		C				10/31/2019	10/31/2019	304	NA	NA	
510000699173	92069 B3		C				10/23/2019	10/23/2019	296	NA	NA	
510000698668	92008		C				10/15/2019	10/15/2019	288	NA	NA	
510000697814	92123 B3		C				10/9/2019	10/9/2019	282	NA	NA	
510000694467	92069 B3		C				10/8/2019	10/8/2019	281	NA	NA	
510000694481	92117 B3		C				10/4/2019	10/4/2019	277	NA	NA	
510000694438	92107 B1		R		MOONEY SERIES 20		10/3/2019	10/3/2019	276	NA	NA	
510000697525	91941 B3		C				10/3/2019	10/3/2019	276	NA	NA	
510000694452	91941 B3		BV		ROCKWELL (STD.)		10/2/2019	10/2/2019	275	NA	NA	
510000696541	92024 B3		C				9/30/2019	9/30/2019	273	NA	NA	
510000694443	91950 B3		C				9/6/2019	9/6/2019	249	NA	NA	
510000694585	91950 B3		C				9/3/2019	9/3/2019	246	NA	NA	
510000691095	92106 B1		C				8/19/2019	8/19/2019	231	NA	NA	
510000670414	92037 B2		C				6/20/2019	6/20/2019	171	NA	NA	
510000670414	92037 B2		R		MOONEY SERIES 20		6/20/2019	6/20/2019	171	NA	NA	
510000670416	92110 B3		C				6/19/2019	6/19/2019	170	NA	NA	
510000678352	92123		C				6/19/2019	6/19/2019	170	NA	NA	
510000670425	91914 B2		BV		ROCKWELL (STD.)		6/18/2019	6/18/2019	169	NA	NA	
510000670425	91914 B2		BV		ROCKWELL (STD.)		6/18/2019	6/18/2019	169	NA	NA	
510000670428	91977 B3		C				6/13/2019	6/13/2019	164	NA	NA	
510000677511	92107 B1		C				6/6/2019	6/6/2019	157	NA	NA	
510000677188	92124		C				6/5/2019	6/5/2019	156	NA	NA	
510000676729	92126 B3		C				5/29/2019	5/29/2019	149	NA	NA	
510000663537	92128 B3		C				5/10/2019	5/10/2019	130	NA	NA	
510000665877	92021 B3		C				4/26/2019	4/26/2019	116	NA	NA	
510000665246	92069 B3		C				4/16/2019	4/16/2019	106	NA	NA	
510000656157	92154 B3		C				4/11/2019	4/11/2019	101	NA	NA	
510000656157	92154 B3		BV		ROCKWELL (STD.)		4/11/2019	4/11/2019	101	NA	NA	
510000664368	92124		C		Y - TRAP		4/2/2019	4/2/2019	92	NA	NA	
510000657575	91941 B3		C				3/22/2019	3/22/2019	81	NA	NA	
510000656017	91950 B3		C				2/28/2019	2/28/2019	59	NA	NA	
510000655337	92024 B3		C				2/25/2019	2/25/2019	56	NA	NA	
510000651262	92128 B3		C				2/21/2019	2/21/2019	52	NA	NA	
510000642172	92037 B2		R		MOONEY SERIES 20		2/12/2019	2/12/2019	43	NA	NA	
510000643846	92154 B3		C				1/25/2019	1/25/2019	25	NA	NA	
510000634759	92081 B2		R		FISHER 32		1/23/2019	1/23/2019	23	NA	NA	
510000642362	92028		C				1/4/2019	1/4/2019	4	NA	NA	
510000634771	92028 B3		C				1/2/2019	1/2/2019	2	NA	NA	
510000634771	92028 B3		R		FISHER 627 R		1/2/2019	1/2/2019	2	NA	NA	
510000718733	92069 B3		C				12/29/2019	12/29/2019	363	NA	NA	
510000677427	92129 B3		C				6/7/2019	6/7/2019	158	NA	NA	
510000656169	92057 B3		R		MOONEY LP-FLANGD-300		4/11/2019	4/11/2019	101	NA	NA	
											0	

Header column "Comment" boxes displayed below for reference.	
Column Heading	**Description and Definition of Required Contents (If not self-explanatory)**
Station Leaks & Emissions	
Number of Stations	
Station Classification	A1 = above grade, pressure <100 psi A2 = above grade, pressure =100-300 psi A3 = above grade, pressure >300 psi B1 = below grade, pressure <100 psi B2 = below grade, pressure =100-300 psi B3 = below grade, pressure >300 psi
Emission Factor (Mscf/yr)	
Annual Emissions (Mscf)	
Explanatory Notes / Comments	

Tab: All Damages	
ID	
Geographic Location	GIS, zip code, or equivalent
Damage Type	E = excavation damage N = natural force damage O = other outside force damage
Pipe Material	PB = cathodically protected steel, bare PC = cathodically protected steel, coated UB = unprotected steel, bare UC = unptotected steel, coated
Pipe Size (nominal)	
Pipe Age (months)	

Pressure (psi)	MOP = maximum operating pressure over the past year
Leak Grade	2 = grade 2 2+ = grade 2+ 3 = grade 3 N = non-graded or ungraded
Above Ground or Below Ground	AH = above ground, hazardous AN = above ground, non-hazardous B = below ground
Discovery Date (MM/DD/YY)	
Repair Date (MM/DD/YY)	
Number of Days Leaking	If date and time stamp are reliable and used consistently by respondent, then emissions may be calculated based on actual time leaking. E.G. Repair time - damage event time = duration of event. If respondent has average or historical leak duration based on the nature and circumstances of damages, then these may be applied to like damage events. The emissions factors should be adequately supported and explained in the filing. If actual time stamps and historical averages are not available, then whole days should be used in the engineering calculation. The leak begins with the damage event date thru repair date or December 31st of subject year, whichever is later. E.G. Days Leaking = Repair date - date of damage + 1 day.
Emission Factor (Mscf/Day)	
Annual Emissions (Mscf)	
Explanatory Notes / Comments	Provide method of calculation and example of formula. Explain how any EF's used were derived.

Blowdowns	
ID	
Geographic Location	GIS, zip code, or equivalent
Number of Blowdown Events	
Annual Emissions (Mscf)	
Explanatory Notes / Comments	

Component Vented Emissions		
ID		
Geographic Location	GIS, zip code, or equivalent	
Station Classification	A1 = above grade, pressure <100 psi A2 = above grade, pressure =100-300 psi A3 = above grade, pressure >300 psi B1 = below grade, pressure <100 psi B2 = below grade, pressure =100-300 psi B3 = below grade, pressure >300 psi	New Column - for type of M&R Station where emission located.
DeviceType	C = connector OE = open-ended line M = meter P = pneumatic device PR = pressure relief valve V = valve O = other devices	
Bleed Rate	L = low bleed I = intermittent bleed H = high bleed NA = not applicable	
Manufacturer		
NumberofDays Emitting	Because the emissions are a factor of design or function, these emissions counted for the entire year.	

Engineering or Manufacturer's based Estimate of Emissions	
Annual Emissions(Mscf)	The emissions should be based on 365 days times the actual volume emitting if known, or the approved Emissions Factor. Note whether the emissions are based on actual volumetric measures in the next column.
Explanatory Notes / Comments	

Component Leaks		
ID		
Geographic Location	GIS, zip code, or equivalent	
Station Classification	A1 = above grade, pressure <100 psi A2 = above grade, pressure =100-300 psi A3 = above grade, pressure >300 psi B1 = below grade, pressure <100 psi B2 = below grade, pressure =100-300 psi B3 = below grade, pressure >300 psi	New Column - for type of M&R Station where found.
DeviceType	C = connector OE = open-ended line M = meter P = pneumatic device PR = pressure relief valve V = valve O = other devices	
Bleed Rate	L = low bleed I = intermittent bleed H = high bleed NA = not applicable	
Manufacturer		
Pressure(psi)	MOP = maximum operating pressure over the past year	

Discovery Date(MM/DD/YY)	List the actual discovery date. If the leak was discovered in the year of interest, then we will assume the component was leaking from the beginning of the year for emissions reporting purposes.
Repair Date(MM/DD/YY)	Date that the component repair stopped the leak. Any associated blowdowns as a result of the repair should be included in the blowdowns tab.
NumberofDays Leaking	Assume Leaking from January 1 of subject year or prior survey date, whichever is later, thru the repair date (if repaired in year of interest) or December 31 of subject year, whichever is earlier. For O&M discovered leaks, assume that the leak begins with the discovery date thru repair date or December 31st of subject year, whichever is earlier.
Emission Factor(Mscf/day)	
Annual Emissions(Mscf)	
Explanatory Notes / Comments	